Commonwealth of Massachusetts
Executive Office of Health and Human Services

Health Information Technology Council May Meeting

May 6, 2013

3:30-5:00 P.M.

One Ashburton Place, 21st Floor, Boston

Agenda

Today's Agenda:

1. **Meeting Minutes approval [5 min]**

2. **Mass HIway Implementation Updates**

   a) Network Health/Tufts Medical Center [25min] – Peter Bristol, Bill Shickolovich, Phill Argyris

   b) Beth Israel Deaconess Medical Center [15min] – John Halamka

3. **Mass HIway Update**

   a) Outreach & Sales Update [10min] – Sean Kennedy

   b) Implementation & Support Update [10min] – Manu Tandon

   c) Phase 2 Update [5min] – Manu Tandon

4. **HIE Strategic & Operational Plan Update [10min] – Sean Kennedy**

5. **Wrap up and next steps [10 min] – Manu Tandon**

Discussion Item 1:

Mass HIway Implementation Updates – BIDMC, Network Health and Tufts Medical Center

Network Health & Tufts Medical Center Investing in HIE – Mass HIway Status

About Network Health

- A statewide Medicaid Managed Care Organization (MCO) providing coverage to ~225,000 enrollees in Mass Health and Comm Care.

- 500 employees based out of our Medford headquarters, many of whom are social workers, nurses, and behavioral health professionals.

- Provides integrated care management services to our enrollees, which support and augment care delivered by our provider and hospital partners.

- Heavily invested in analytics, risk stratification and predictive tools and shares all the resulting information with providers through CareInsight, our web-based performance analytics platform.

- View health information exchange as a catalyst and necessity for improved patient experiences through more timely and coordinated action, improved quality, and cost containment.

Clinical Data Trading Partners

Testing:

— Tufts Medical Center (active)

— Beth Israel (on-deck)

In planning:

— Children's Hospital

— Brockton Neighborhood Health Center

Others we hope to engage with:

— More PCMH and CHC sites

— More hospitals: UMASS Memorial, MGH

— Everyone

Working with Tufts Medical Center

- 6/10/11, 3:58 PM: Commitment between Tufts Medical and Network Health to work together as part of the clinical HIE prototype efforts led by NEHEN

- 10/16/12, 11:47 AM: Tufts Medical and Network Health join other early adopters in the Golden Spike launch of Mass HIWay

- 4/17/13, 10:18 PM: Tufts Medical and Network Health successfully send and receive 40,000 test transactions across the Mass HIway

A few of the good people doing important work:

<u>Phillip, Atia</u>
    Determined project leaders with impressive sticktoitiveness

<u>Jean</u>
    Clinical leader championing our cause

<u>Carmen, Aaron</u>
    Technical excellence on the frontline

<u>Kimberly, Ian, Jeanine</u>
    Coordinators/technologists from EOHHS & Orion providing professional advice, upgrades and support

- **Inpatient Discharge Summary (receiver)**

- **Emergency Dept Visit Summary (receiver)**

- **Lab Data (receiver)**

- **eCarePlans (sender)**

Adaptors (Interfaces)

- Network Health's clinical care management system is McKesson CCMS

- Microsoft Biztalk is used as the main interface engine which connects the LAND gateway to CCMS. Current version of CCMS is HIE/CCD-unfriendly; future versions promise improved interoperability

- For inbound, currently we use a custom process to parse the CCD, identify the patient, attach a human-readable version of the CCD to the patient's record in CCMS, and alert clinicians.

- For outbound, we are developing a custom process to populate and transmit CCDs for the eCarePlan use case

What We've Learned So Far

- Clinical data exchange makes a real difference in people's care

- Attach and view first; parse & load later

- Test network is important

- Clinical champions make things happen

- The impact on clinical workflow cannot be underestimated

- Security and consent matters take time

- Value of information rises with its currency, but the workflow triggers to transmit CCDs are involved

- Nomenclature mapping is difficult

- There's no challenge we can't overcome

Tufts Medical Center - Overview

- Tufts Medical Center
  - World-class academic medical center
  - Full-service hospital for adults and Floating Hospital for Children
  - Principal teaching hospital for Tufts University School of Medicine

- Inpatient
  - Inpatient Discharges per Year: 20,000
  - Inpatient Services: 30+

- Outpatient
  - Outpatient Visits per Year: 500,000
  - Outpatient Clinics: 80+

- EMRs
  - Inpatient: Soarian Clinicals (Siemens)
  - Outpatient: eCW / EHX (eClinicalWorks)

Tufts Medical Center - Technology Components

- Soarian Clinicals – Siemens

  - *Full clinical repository including orders, results, vital signs, I&O, assessments, allergies, medications*

    - *Hosted ASP at Siemens in Malvern, PA*

- TIBCO Engine

- Automate – Network Automation

- SQL Server

- C#

- Secure Web Services, REST, SOAP

Tufts Medical Center

Tufts Medical Center – Mass HIE Integration
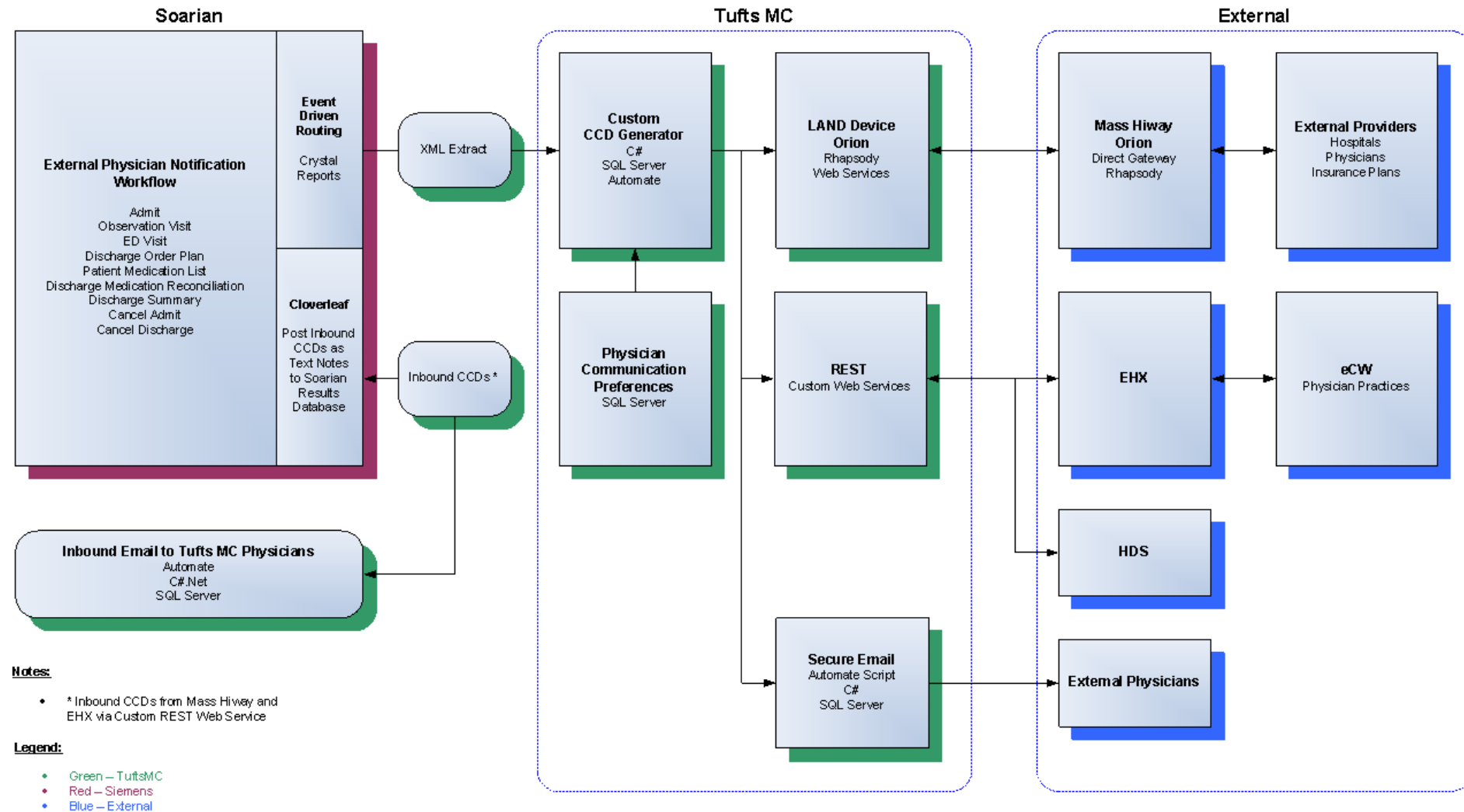
Tufts Medical Center - Strategy

- CCD Creation
  - *Initial Strategy:* Create custom CCD using Soarian Extract, XML, C#, SQL Server, Automate scripting
  - *Long-term Strategy:* Migrate CCD creation to Siemens platform: Clinical Letter and AIS
  - *Coded Sections:*
    - Currently have coded payor section only
    - Allergies, Medications, Problems, Lab Results are next priorities

- Integration with Mass HIE
  - Implement Orion Rhapsody Interface Engine / LAND Device
  - Communicate with LAND Device via Web Services

- Integration with eClinicalWorks / EHX
  - Create custom REST Web Service
  - Communicate with EHX via custom REST Web Service

Tufts Medical Center - Strategy (Continued)

- Sending CCDs Outbound

  - *Mass HIE:* Send CCDs outbound via Mass HIE LAND Device to external Providers: Hospitals, Primary Care and Referring Physicians, Insurance Plans

  - *eClinicalWorks:* Send CCDs outbound via custom REST Web Service to eClinicalWorks / EHX

  - *HIM Review:* CCDs are sent to electronic review folder. HIM manually reviews each CCD for Patient Sensitive Information prior to sending externally

- Receiving CCDs Inbound

  – *Mass HIE:* Receive CCDs inbound via Mass HIE LAND Device

  – *eClinicalWorks:* Receive CCDs inbound via custom REST Web Service

  – *Post to Soarian Clinicals:*

    o Technical Approach
      – Initial Strategy: Post inbound CCDs from Mass HIE to Soarian as text result
      – Long-Term Strategy: With Soarian Clinicals v3.4, include coded sections and consume in Soarian

    o Patient Matching Approach
      – Initial Strategy: HIM department will review manually, assigning MR # to enable posting to appropriate patient
      – Long-Term Strategy: Exploring matching algorithms for potential automation

Tufts Medical Center - Testing Status and Next Steps

- Testing Status

  - Conducting volume testing with Network Health; sending 40,000 CCDs per day

  - Updated hardware to accommodate volume needs; delivered new LAND Device with 900 Gig data partition and data encryption enabled

  - Exploring CCD size considerations; reviewing Mass HIE size (10 Meg) with potential future CCD components

- Next Steps

  - Complete Volume Testing

  - Address Consent requirements as defined by Mass Chapter 305 Section 6F-1; reviewing opt-in

  - Go Live with Network Health

Tufts Medical Center

Tufts Medical Center - Thank You

- **Mass HIE**
  - Kim Grose
  - David Bowditch

- **Orion Health**
  - Ian Rowe
  - Jonathon Price
  - Nick Choi
  - Russ Lutz
  - Sean Burke

- **Network Health**
  - Peter Bristol
  - Atia Amin
  - Carmen Wu

- **Tufts Medical Center**
  - Aaron Tatko

Beth Israel Deaconess Medical Center Mass HIway Progress Report

BIDMC Mass HIway Progress Report

Rapid Progress among many stakeholders

- We have successfully sent a CCD to MAeHC with a filename that works for both of us.   We will send 4,000 CCD's / day beginning in May.

- We are currently testing with Network Health to move our feed of CCD's from NEHEN to HIE.   We have successfully tested BIDMC sending.

- Likely all our feeds will move to the HIE soon.   Only Neighborhood health has not asked to test with us yet.

- Tufts has expressed interest in moving our current feed of Lab data to HIE and requested we test with them.

BIDMC Mass HIway Progress Report

Rapid Progress among many stakeholders

- Working with DPH in using the HIE to send immunization HL7 messages. Lab data should soon follow.

- Partners has expressed interest in moving our current CCD feed for joint clinical support from NEHEN to HIE. We are ready to test

- BPHC has expressed interest in moving our current feeds of syndromic surveillance and lab information to the HIE from NEHEN. We are ready to test

BIDMC Mass HIway Progress Report

Modular Certification

- Three test scripts exercise Direct functionality (b1, b2, e1)

- Propose to bring CCHIT, Orion, and BIDMC together to execute those tests needed for the Mass HIway to achieve modular certification

- BIDMC needs to do this anyway for self certification of its home built systems

Discussion Item 2:

Mass HIway Update – Outreach & Sales Update, Implementation & Support Update, Phase 2 Update
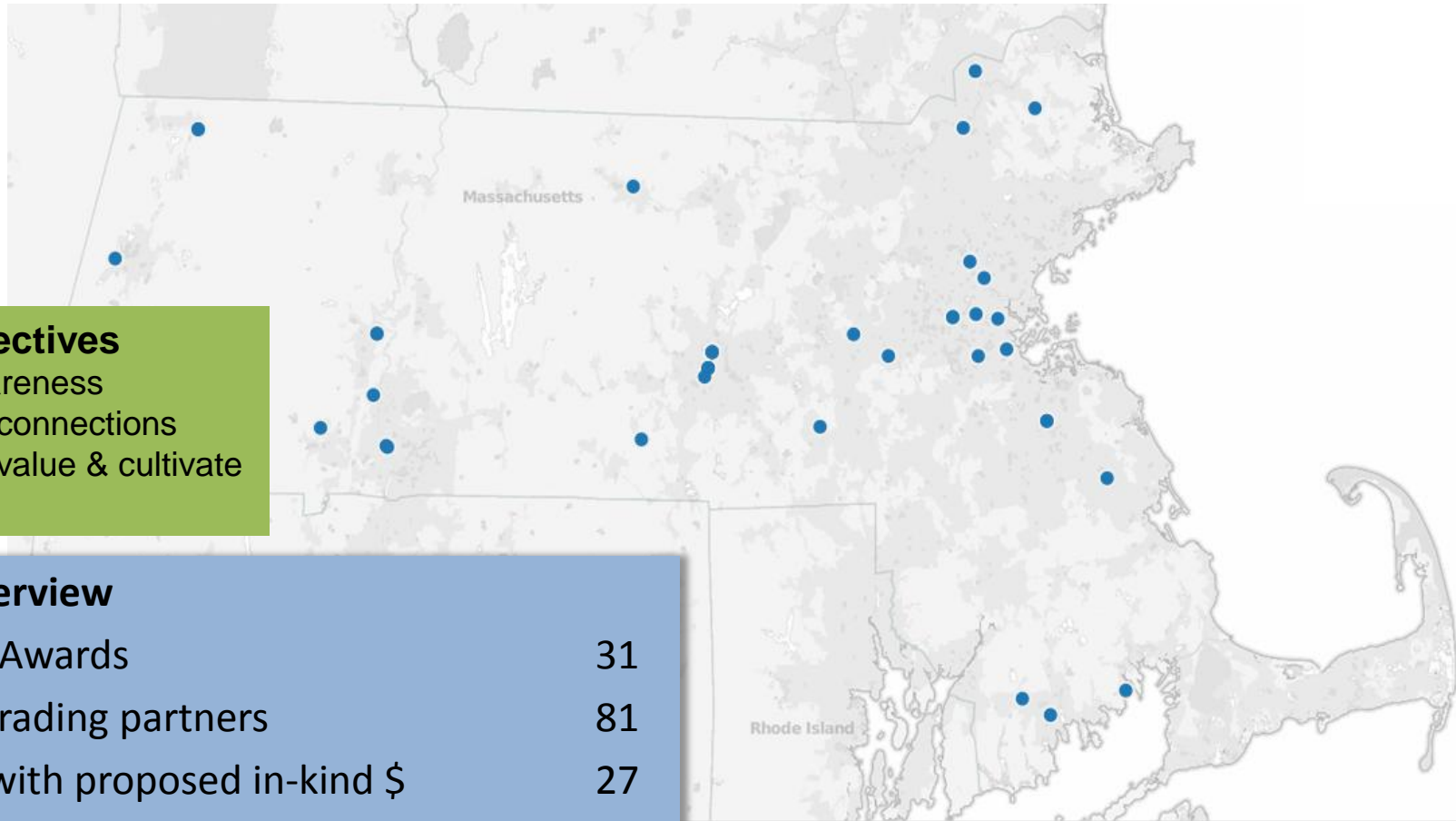
HIway Implementation Grants

Grant Objectives
1. Build awareness
2. Catalyze connections
3. Build the value & cultivate 'stories'

Grants Overview

Planned Awards	31
Unique trading partners	81
Awards with proposed in-kind $	27
Grant funding	$2.2M

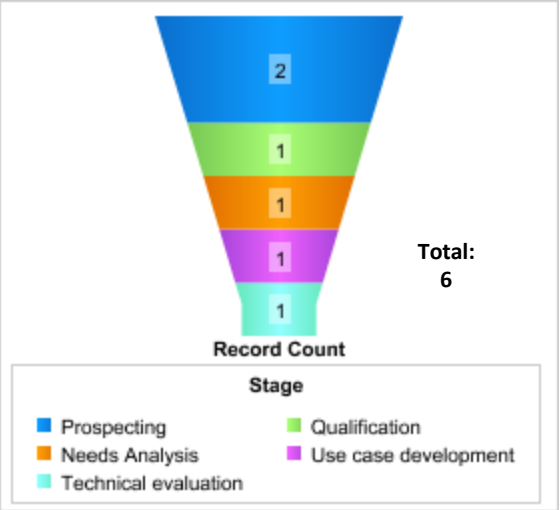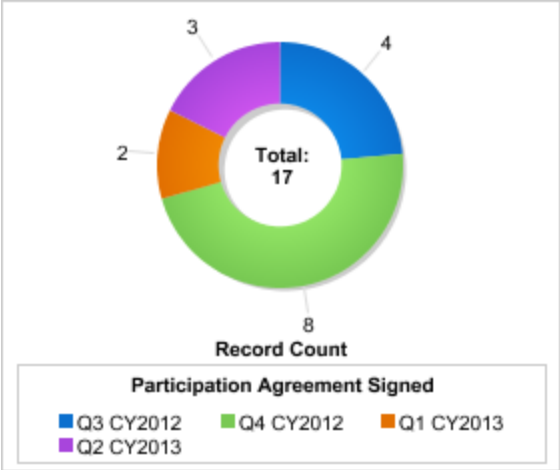**Map plotting 'primary applicants' of grants awarded**

Data as of 4/29/2013

Opportunities (by stage)

Total: 95

Opportunities (new in April)

Total: 6

Participation Agreements signed
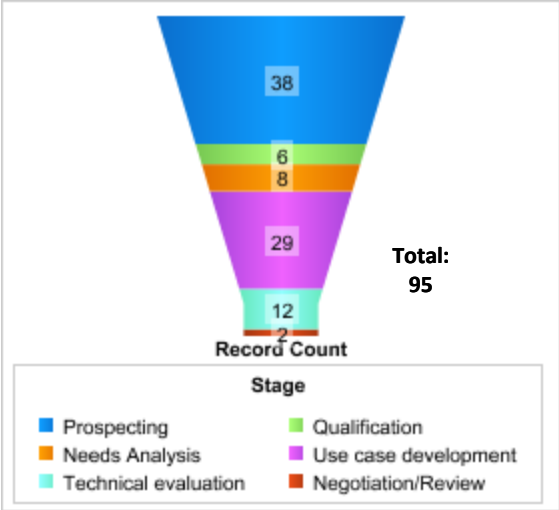
Total Orgs	HIway Revenue
~410	~$850,000

Total Orgs	HIway Revenue
17	~$20,000

NOTE: Orgs may not be unique. Some orgs are in more than one opportunity. Revenue, however, is **not** counted twice.

'Sales' gains commitments (i.e. a signed Participation Agreement, signed Grant contract) from organizations by cultivating opportunities. Opportunities reflect a set of trading partners centered on a common use case.

Grants Awarded
(anticipated)

Grant	#
HIway Vendor Interface Grants	2
HIway Implementation Grants	27

Organization	Use Case	Target Date
Tufts Medical Center and Network Health	Discharge Summaries from Tufts Medical to Network Health for follow-up care – in testing	~~April 15 in Production~~ May 10, 2013
BIDMC with MAeHC, Network Health	Data analytics; movement of CCDs	May 2013
BIDMC and DPH Immunization	DPH Registries for ELR and Immunizations went live on 4/28/13; BIDMC will begin process to move immunization data through the HIway	May 2013
Holyoke Medical and community providers	Coordination of care will be first Direct connection (w/o LAND); also has potential to connect its HIE to the MA HIway	May 2013 for Holyoke Medical test connection; working through process to connect with other providers within Holyoke HIE
Next Active:		
Boston Public Health, Children's, Atrius, Partners	Various stages of testing using Direct LAND	TBD
Providers using DPH registries	ELR, Immunizations – expectation that initial set of providers will be the above	Ongoing
Meditech	50+ sites in Commonwealth	June-July 2013

- **Transactions exchanged up from 5,984 in March to 337,956 during the month of April – all test**
- **Developers Tool Pilot**
  - Collection of integrated artifacts for quicker, efficient connection to HIway (i.e. XDR SOAP connector)
  - Experience shows this is more effective than spec release
- **In support of providers connecting to the DPH registries:**
  - Implemented messaging, outreach plan with DPH
  - Modified Participation Agreements to allow "bridge" between current agreement and use for public health
  - Developed Implementation Guides

Phase 2 overall timeline

Mass HIway Phase 2 high level project schedule

Activity	Target date
Submit IAPD to CMS	Dec 2012
CMS approval of Phase 2 IAPD	~~April 2013~~ **Completed**
Phase 2 contract (or change order) executed	~~April 2013~~ May 2013
Go-live - Public Health - Immunization Registry Node	~~April 28 2013~~ **Completed on 4/28/13**
Go-live - Public Health - Reportable Lab Results (ELR) Node	~~April 28 2013~~ **Completed on 4/28/13**
Testing - Public Health - Syndromic Surveillance Node	~~April 12 2013~~ May 24, 2013
Testing - EOHHS – Children's Behavioral Health (CBHI) Node	May 24, 2013
Go-live for Phase 2, Release 1 (Other Public Health interfaces)	May – Oct 2013
Go-live for Phase 2, Release 2 (CDR, EMPI, RLS, Consent)	Oct 2013 – Mar 2014

Discussion Item 3:

Mass HIway Strategic and Operating Plan Update

Mass HIway Strategic and Operating Plan

Timeline

Task	Date
Preliminary outline and section assignments to EOHHS/MeHI	29-Mar
HIT-C meeting - intro HIE-SOP update plan	8-Apr
First draft for review by EOHHS & MeHI	17-Apr
Iteration period	18-Apr – 10-May
Submit draft to HIT-C for review	10-May
Receive HIT-C feedback	17-May
Incorporate any HIT-C feedback	21-May
Final Approvals	23-May
Submission to ONC	**24-May**

- **The purpose of the 2013 HIE-SOP submission is to update ONC on our efforts.**

- **The primary components of this update include the following new submissions:**
  - Sustainability Plan
  - Program Evaluation Plan
  - Privacy and Security Framework

- **Additionally, we will update them on any 'Changes in HIE Strategy'.**

Discussion Item 4:

Wrap up and next steps

HIT Council 2013 Meeting Schedule*:

- January 14 – 11th Floor Matta Conference Room
- February 4 – 11th Floor Matta Conference Room
- March 13 – 11th Floor Matta Conference Room
- April 8 – 21st Floor Conference Room
- May 6 – 21st Floor Conference Room
- **June 3**
- July 1
- August 5
- September 9
- October 7
- November 11
- December 9

*All meetings to be held from 3:30-5:00 pm at One Ashburton Place, 21st Floor, Boston, unless otherwise noted

Next HIT Council Meeting: June 3, 2013

Preliminary Agenda:

- Advisory Group Update/Discussion
  - Discussion Topics?
- Mass HIway Update